

1. MATLAB provides an example video called "shuttle.avi". You can view it using the code `implay("shuttle.avi")`.

1 point



Your task for this quiz is to measure the flame propelling the rocket.

What is the frame rate of this video (in frames per second)?

30

2. The last few frames of the "shuttle.avi" video are taken from a new camera angle. Before analyzing this video, preprocess it by removing these frames.

1 point

How many frames does this new video have?

118

3. What is the duration in seconds of this new video? Provide your answer up to 2 decimals.

1 point

3.93

4. Create a mask for each frame of this video that isolates the nearly-white flame exiting the rocket. Do this by converting each frame to grayscale. Then label all pixels with intensities less than or equal to 245 as false, and all pixels with intensities greater than 245 as true.

1 point

How many more true (nonzero) pixels are present in the last frame compared to the first frame?

2552